

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1 1. (currently amended) A method for registering at least one wireless access point in
2 a ~~wireless local area network (WLAN)~~ wireless area network (WAN), comprising:

3 broadcasting, from a ~~WLAN WAN~~ gateway, a discovery message to said at least
4 one wireless access point in said ~~WLAN WAN~~;

5 receiving at said ~~WLAN WAN~~ gateway, from at least one wireless access point
6 receiving said discovery message, an access point registration request comprising access
7 point location, IP address, MAC address, radio type, and power level information of said
8 wireless access point; and

9 storing said access point registration request information at said ~~WLAN WAN~~
10 gateway.

1 2. (currently amended) The method of claim 1, wherein each wireless access point
2 selects a random delay prior to sending said access point registration request to said
3 broadcasting ~~WLAN WAN~~ gateway.

1 3. (currently amended) A method for registering ~~at least one~~ a wireless access point
2 in a ~~wireless local area network (WLAN)~~ wireless area network (WAN), comprising:

3 broadcasting a gateway discovery query message from said ~~at least one~~ wireless
4 access point;

5 receiving, from at least one ~~WLAN WAN~~ gateway, a respective service discovery
6 message;

7 selecting, by ~~said wireless access point~~, an appropriate ~~WLAN WAN~~ gateway in
8 an instance where more than one service discovery message is received; and

9 sending an access point registration request comprising access point location, IP
10 address, MAC address, radio type, and power level information of said wireless access
11 point to said selected WLAN WAN gateway.

1 4. (previously presented) The method of claim 3, wherein said selecting further
2 comprises:

3 determining if said wireless access point is currently registered; and
4 sending said service discovery message to said wireless access point.

1 5. (currently amended) The method of claim 3, wherein said selecting comprises:
2 determining an appropriate WLAN WAN gateway using at least one of the
3 following: a cost of using a WLAN WAN gateway, a load at a WLAN WAN gateway,
4 and system features provided by a WLAN WAN gateway.

1 6. (original) The method of claim 3, wherein said sending an access point
2 registration request further comprises sending security information in said access point
3 registration request.

1 7. (currently amended) The method of claim 6, wherein each wireless access point
2 selects a random delay prior to sending said access point registration request to said
3 WLAN WAN gateway.

8. – 32. (canceled)